juice change it to a yellow colour, but the smallest quantity of acid is sufficient to restore its purple hue. Exposure to the air or large dilutions is sufficient to restore the original purple.

M. Braconnot considers the yellow liquor produced by the juice of these berries and lime water as one of the most delicate tests of the presence of acid. Into two glasses he put equal quantities of the juice made yellow and of an infusion of litmus of equal depth of colour. More than sixty drops of a very weak acid were required to redden the infusion of litmus, but less than fifteen restored the purple colour of the Phytolacca. Hence it follows, that the yellow liquor is four times as sensible to the presence of acid, as the infusion of litmus. It however requires to be used immediately after it is prepared, since a few hours cause a spontaneous change in it, which begins with a precipitate, and ends with a deprivation of colour.

The effects produced on this purple colour by other reagents were as follows. Pure alkalis gave it a yellow colour. Alkaline subcarbonates a violet, that fades and becomes yellow by standing. Weak acids no perceptible change. Dilute oxymuriatic acid a complete deprivation of colour with white flocculi. Alum nothing at first, but

after some days, a very light red precipitate. Muriate of lime no change. Muriate of tin a red sediment inclining to lilac, leaving the fluid colourless. Nitrate of lead a precipitate of the colour of wine lees. Super oxided sulphate of iron, a dirty violet.

Many of the above experiments I have repeated, and added others. The yellow colour produced by the alkalis borders on green. Pure strontian produces the same change as potash and lime. Pure barytes wholly discharges the colour on standing a short time. Acetate of lead forms a scarlet precipitate, leaving the liquid nearly colourless.

The purple colour that tinges the cuticle of the stalks of the Phytolacca is stated in the above memoir, to be of the same nature as that in the berries, and to afford the same results.

The taste of the berries is sweetish and nauseous, leaving behind a very slight sense of acrimony. M. Braconnot, found that at a moderate temperature, the juice underwent the vinous fermentation, and yielded alcohol by distillation. Dr. Shultz procured from half a bushel of the berries six pints of spirit sufficiently strong to take fire and burn with readiness.